

MEMORANDUM of FINDINGS

Utah Coal Regulatory Program

May 17, 2007

TO: Internal File

FROM: Joe Helfrich, Lead *for JCH*

RE: May 10, 2007 Incidental Boundary Change, Co-Op Mining Company, Bear Canyon Mine, C/015/0025, Task ID # 2804

SUMMARY:

On May 10, 2007 the Division received an application from Co-op Mining Company to conduct underground mining activities in 126.93 acres of private coal. The surface owner is the U. S. Forest Service. The area can be located on the Hiawatha 7.5 minute USGS Quadrangle map in Township 16 South Range 8 East section 19: Lot 1, NW/4NE/4, NE/4NW/4, SLBM, Emery County, Utah. The main portion of the acreage needed, (10 acres in the SW corner of lot 1) will allow for the development of the headgate entries for panel #2 and provide continued employment for the employees at the Co-op mine. The request to mine this private coal acreage is for development mining only. No surface subsidence will occur.

According to the regulations cited at R645-303.220 this application would be categorized as an incidental boundary change (IBC) and does not require a public comment period. The acreage that includes 126.93 acres of private coal represents approximately 2.8 percent of the total permitted acreage, (4416 acres) which is less than the 15 percent threshold requirement for an IBC. This memo includes a review of the IBC application and the applicable portions of the recent Technical Analysis (TA) prepared for task #2734.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

Analysis:

The information for the area described in the IBC application is included within the technical analysis (TA), for task # 2734. Correspondence with consulting agencies includes the following documents:

On May 17, 2007, the Office of Surface Mining notified the Division that this proposal is not a mining plan action; therefore federal mining plan approval is not required.

Letter of concurrence dated March 30, 2007, from the Utah State Historic Preservation Office (SHPO) acknowledging no historic properties will be affected.

U.S. Fish & Wildlife Service (USFWS), Letters dated December 1, 2006 and January 22, 2007, OGM/USFWS Section 7 Informal Consultation, internal memo dated April 4, 2007,

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The Legal description for the 126.39 acre parcel is included in the IBC application. The area can be located on the Hiawatha 7.5 minute USGS Quadrangle map in Township 16 South, Range 8 East, section 19: Lot 1, NW/4 NE/4, NE/4 NW/4, SLBM, Emery County, Utah.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

The IBC application includes the following plates that have been P.E. certified:

Plate 1-2 Surface Ownership,
Plate 1-3 Sub-Surface Ownership,
Plate IBC-1 Area and
Plate 5-1C Tank Seam Workings

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

GENERAL

Regulatory Reference: 30 CFR 783.12; R645-301-411, -301-521, -301-721.

Analysis:

The analysis of the Environmental resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

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A cultural resource survey of the proposed lease addition areas,(submitted July 22, 2005), is also provided for in the MRP as appendix 4F. This survey basically included the cliff faces and escarpments in sections 19 and 30 for the Wildhorse Ridge addition. Surveys conducted in 2006 by Sagebrush Consultants LLC included a literature search for the Bear Canyon Lease Extension areas (see, Appendix 4H and 4I) and a ground survey of the escarpments and high probability areas within the proposed Bear Canyon Lease Extension. The search identified a number of historic resources located in the escarpment areas of the Castle Gate Sandstone formation. According to Bruce Ellis, (USFS Archaeologist, Manti-La Sal National Forest) and Matt Seddon, (SHPO), the results of the literature search indicated the need to conduct a ground survey of the escarpments and high probability areas within the proposed Bear Canyon Lease Extension. The permittee and representatives from Sagebrush Consultants LLC met with Bruce Ellis and defined the scope of the project. It was determined that approximately 820 acres of Federal and private land would be surveyed. Mr. Ellis reviewed the results of the completed survey including the private land portions. A copy of the final survey prepared by Sagebrush Consultants LLC has been included in the MRP. A concurrence letter from the State Historic Preservation Office is on file at the Division office in Salt Lake. *There are cultural resource conditions that are included as Attachment A to the current permit. The conditions require the permittee to monitor subsidence annually throughout the life of the mine and survey those areas that have subsided that were not included in previous survey inventories.*

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

Analysis:

The analysis of the vegetation resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Analysis:

The analysis of the fish and wildlife resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

The analysis of the land use resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

The analysis of the geologic resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

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The information provided is adequate to meet the requirements of this section of the regulations.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

The analysis of the hydrologic resource information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

Regulatory Reference: 30 CFR 784.17; R645-301-411.

Analysis:

The analysis of the protection of public parks and historic places applicable to this IBC application is included in the TA and cultural resource survey for task # 2734. According to the information in this section of the TA, the Division received a letter from the SHPO concurring with the Division's determination that no historic resources would be affected for those areas inventoried.

There are no public parks within the current permit area or the proposed IBC.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The analysis of the coal recovery information applicable to this IBC application can be found in the TA for task # 2734. The following information from the TA is provided:

Coal recovery is addressed on page 5-14, **Recovery Rate** of the Task ID #2292 submittal. Utilizing continuous miner advance and retreat techniques, a seventy percent recovery rate has been determined. Table 5-1, Coal Reserves – Bear Canyon Mine lists the in place tonnage, as well as the recoverable tons for seven federal coal leases (U-46484, U-61048, U-61049, U-024316, U-024318, U-020668, and U-38727: lease U-024318 has been mined out and is not included in the current Bear Canyon Mine permit). Tonnages for the fee coal area are also listed.

The Permittee has provided a copy of the lease information for the 2,740 acres of fee coal owned by C.O. P. Coal Development Company. This agreement is included in the R2P2 information and is considered current.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

The analysis of the information included in the subsidence control plan that is applicable to this application is included in the TA for task # 2734. As noted in the IBC application, mining in the 126.93 acre parcel is for development mining only. Accordingly, no surface subsidence will occur.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE INFORMATION

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Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

The analysis of the fish and wildlife information applicable to this application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

Analysis:

The analysis of the vegetation information applicable to this IBC application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

The analysis of the hydrologic information applicable to this IBC application is included in the TA for task # 2734.

General

The MRP includes operational ground-water and surface-water monitoring plans based upon the PHC determination and the analysis of baseline hydrologic and geologic information in

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the permit application. These plans provide for the monitoring of parameters that relate to the suitability of surface and ground water for current and approved post mining land uses and to the objectives for protection of the hydrologic balance, as well as the effluent limitations found at 40 CFR Part 434. The plans identify the quantity and quality parameters to be monitored, sampling frequency, and site locations.

Additional analyses of the required hydrologic information applicable to this application are included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

The analysis of the maps, plans, and cross sections of mining operations related to this IBC application is included in the TA for task # 2734. The IBC application also includes the following plates:

Plate 1-2 Surface Ownership
Plate 1-3 Sub-Surface Ownership
Plate IBC-1 Area and
Plate 5-1C Tank Seam Workings

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

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The analysis of the postmining landuse information applicable to this application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

The analysis of the protection of fish and wildlife information applicable to this application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, ET seq.

Analysis:

The analysis of the bonding and insurance information applicable to this IBC application is included in the TA for task # 2734.

General

The surety bond on file for the Division covers Exhibit A, the permit area. The Division determined the amount needed for the Division to reclaim the Bear Canyon Mine in the event of bond forfeiture. That amount is \$2,187,000 in 2008 dollars. There is no new surface disturbance or additional surface facilities associated with this IBC application.

Additional analysis of the bonding and insurance information applicable to this application is included in the TA for task # 2734.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The Wildhorse Ridge modification, the Bear Canyon Lease Extension Project (which includes this 126.93 acre IBC application area) are located within the current Gentry Mountain CHIA. The CHIA was updated in March 2007 to include the Bear Canyon Lease Extension Project.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

RECOMMENDATIONS:

The IBC application is recommended for approval.